

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

MEMORANDUM

US EPA RECORDS CENTER REGION 5



399054

DATE: OCT 04 1994

SUBJECT: Regional Decision Team Summary Report for the Roadway  
Trucking Terminal SACM Site

FROM: Jodi Traub, Acting Associate Division Director  
Office of Superfund

A handwritten signature in dark ink, appearing to read "J. Traub", written over the "FROM:" line.

TO: File

Attached is the "decision Summary" of the RDT for the Roadway  
Trucking Terminal site. This site was not presented to the RDT,  
however, RDT members have concurred on the site.

Attachment

cc: D. Ballotti  
L. Fabinski, ATSDR

ROADWAY TRUCKING TERMINAL  
CHICAGO HEIGHTS, ILLINOIS

REGIONAL DECISION TEAM (RDT) DECISION SUMMARY

Site Assessment Team Members

Wm. Turpin Ballard, RPM  
Brad Benning, OSC  
Bruce Everetts, IEPA  
Alan Altur, SAM  
Jerry Kujawa, ORC

Introduction

This report summarizes the recommendations of the site assessment team (SAT) for the Roadway Trucking Terminal site (RTT). The RTT Site was assessed based on the concepts of, and consistent with, the Superfund Accelerated Clean-up Model (SACM). This document forms the basis for the RDT to determine that a site evaluation has been accomplished under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Based on the circumstances at the site and a qualitative assessment of the potential risk to human health and the environment, the SAT recommends that no further action be taken under the authority of CERCLA.

Background

Although the business address is Chicago Heights, the Site is located adjacent to that city, in Sauk Village on Lincoln Highway, within 1/2 mile of the Calumet Expressway (Figure 1). The Site is owned by Roadway Services Inc., a subsidiary of a national trucking firm. This active, 75-acre facility contains two truck terminals, two maintenance buildings, and several truck bays (Figure 2). A manufactured wetland is located to the north and west, adjacent to the Site. A mobile home park is located adjacent to the northeastern and eastern boundary of the facility. This park is hooked into the municipal water supply. To the south are a Conrail right-of-way and residences, and to the west is a managed wetland and Interstate 394.

Five 20,000 gallon underground storage tanks (USTs) on-site are used to store gasoline, motor oil, and antifreeze. Waste oil from truck maintenance is stored in a 2,000 gallon UST in the southwestern corner of the Site. Waste antifreeze is stored in a 200-gallon above-ground tank. Waste oil and anti-freeze are picked up by a contractor for off-site disposal.

Drainage ditches collect runoff from the paved parking and operational areas and direct it to three sumps. The runoff is treated by oil-water separation. The water effluent is discharged to a drainage culvert that drains north to a manufactured wetland, and the oil portion of the runoff is stored

on-site prior to off-site shipment for disposal.

Several spills have occurred at the Site, primarily of petroleum products, but there is at least one documented spill of pesticides that was contained indoors. Evidence of spills surface spills has been documented during site inspections by local and State authorities, and recommendations for clean-up have been made. In most cases it appears some type of clean-up actions were taken. Based on a Site Assessment and Underground Storage Tank Removal Report (February, 1993) the Illinois Environmental Protection Agency (IEPA), Leaking Underground Storage Tank (LUST) Section, requested Roadway to conduct a comprehensive soil and ground water investigation. The outcome of this effort is still pending.

Most of the ground water users draw water from the Galena-Platteville aquifer, which is below the confining Maquoketa Shale. The remaining users draw water from the first bedrock aquifer, the Niagara Dolomite. A review of all well logs provided by the Illinois State Water Survey for the area indicates a consistent clay layer between the water table and the Niagara bedrock. This layer is frequently described as a yellow-brown clay overlying a blue clay. The interpretation of this description would be a glacial till overlying a lake clay. This subsurface geology would tend to retard the downward movement of contaminants.

U.S. EPA performed a site inspection (SI) in 1990, and an expanded SI in 1993. The SIs documented releases of low levels of contaminants in ground water and sediments. One monitoring well of the three tested showed cobalt, iron, manganese and nickel above background, although no ground water contamination was detected that exceeded any primary Maximum Contaminant Levels (MCLs). The contaminants of concern in sediments were primarily carcinogenic polynuclear aromatic hydrocarbons (CPAHs) (Table 1). A comparison of the analytical results of the one sample with significant CPAHs, to screening levels adopted by the Region 5 SACM Implementation Team, shows that for sediments, the only compounds that contribute to a cancer risk greater than  $1 \times 10^{-6}$  are the CPAHs. Based on a preliminary risk evaluation using the highest concentration reported, it is estimated that the CPAHs in sediment in the drainage ditches present an ingestion risk of approximately  $1.6 \times 10^{-5}$ , based on standard industrial exposure scenarios outlined in EPA risk assessment guidance.

The ground water results indicate that a hazard index (HI) of 1 is exceeded for manganese. However, there is nothing in the site history to indicate manganese was ever a waste stream at the Site, and although manganese is elevated above the levels seen in the one up-gradient well that was sampled, that well also contains manganese at levels that exceed a HI of 1. Given the

hydrogeology in the area, and the fact that no drinking water wells are completed in the surficial materials, this contamination does not present an actual or potential threat to human health or the environment.

#### Decision and Basis for Decision

The SAT recommendation for the RDT is that no further action under CERCLA is warranted for this site. The recommendation is based on the preceding background information and the discussion provided below.

Ordinarily the estimated cancer risk would be sufficient for the site assessment team to recommend further action. However, it is clear from a review of the available information that the contamination of concern in the sediments is the result of on-going facility operations, including maintenance of the vehicles. Just running the truck motors as they stand in the parking areas, a normal practice with diesel engines, can contribute significantly to the CPAH levels in the adjacent drainage ditches. The only sample that contained significant levels of CPAHs was taken where the site drainage system discharges into the manufactured wetland. Samples taken from the adjacent managed wetland to the west of the site were non-detect for CPAHs, indicating very limited migration potential to other surface water bodies.

With respect to ground water, the only contaminant that exceeded a health-based level was manganese, and that level was exceeded in up-gradient as well as down-gradient wells. Manganese is a naturally occurring element and cannot be linked to a release from the site with available information.

This active facility is expected to remain active for the foreseeable future. Such facilities exist and operate across the nation. It is outside the scope of the Superfund program to compel clean-up at such facilities, especially when a return to normal operations would likely result in re-contamination of the site. In addition, the IEPA LUST program has jurisdiction over clean-up of the subsurface petroleum spills.

The RDT concurs with the recommendations of the SAT. Unless further information indicates otherwise, The RTT site will be removed from further consideration for NPL listing, i.e., no further remedial action planned (NFRAP)

TABLE 1. Estimated Maximum Soil/Sediment Ingestion Risk at Roadway Trucking Terminal

Carcinogenic PAHs	Slope Factor	EPC mg/kg	Risk
Benzo[a]Anthracene	.73	2.4	3.0E-07
Benzo[b]Fluoranthene	.73	12.0	3.5E-09
Benzo[k]Fluoranthene	.073	12.0	1.5E-06
Benzo[a]Pyrene	7.3	4.3	1.5E-06
Indeno[1,2,3-cd]Pyrene	.73	3.0	5.5E-06
Dibenz[a,h]Anthracene	7.3	.85	3.8E-07
Chrysene	.0073	2.7	1.1E-06
TOTAL RISK			1.6E-05

Exposure Frequency (EF) 250 days  
 Exposure Duration (ED) 25 years  
 Averaging Time (AT) 70 years  
 Body Weight (BW) 70 kg  
 Ingestion Rate (IR) 50 mg/day soil  
 Slope Factor (SF)  
 Exposure Point (C)  
 Concentration

Risk Equation

$$\text{Cancer Risk (ELCR)} = \frac{\text{SF} \times \text{C} \times 10^{-6} \text{ kg/mg} \times \text{IR} \times \text{EF} \times \text{ED}}{\text{BW} \times \text{AT} \times 365 \text{ days/yr}}$$

Reduced Equation

$$\text{ELCR} = \text{SF} \times \text{C} \times 1.75\text{E-07}$$